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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,083	11/29/2001	Jorg Schieferdecker	454-010513-US(PAR)	9326

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PERMAN & GREEN
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EXAMINER	
MORAN, TIMOTHY J	

ART UNIT	PAPER NUMBER
2878	

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/914,083	SCHIEFERDECKER ET AL.	
	Examiner	Art Unit	
	Timothy J. Moran	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-6, 10, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Oda, EP Patent No. 0 845 664. Regarding claims 1 and 17, Oda describes (col. 6, lines 33-39) a sensor module comprising a sensor element (401), a reference means (403), and a processing circuit and combination means ("integrated circuit" mentioned in col. 6, line 38), where the elements are formed as an integrated circuit on a single chip. The presence of a common housing is implied.

Regarding claims 5-6, the use of amplifiers is implied.

Regarding claim 10, Oda describes an imaging device (col. 1, lines 7-15).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-4, 7-8, 11-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda. Regarding claims 2-3 and 11, conductive housings, small cylindrical housings, and housings with windows are well known in the art of electronic devices. Therefore it would have been obvious to one of ordinary skill in the art to use such housings in the device of Oda for the advantage of protection.

Regarding claim 4, TO5 housings are well known in the art of electronic devices. Therefore it would have been obvious to one of ordinary skill in the art to use such housings in the device of Oda for the advantage of protection.

Regarding claim 7, the use of squaring means is well known in the art of radiation detectors to process signals. Therefore it would have been obvious to one of ordinary skill in the art to use such elements in the device of Oda for the advantage of enhanced signal.

Regarding claim 8, signal compensation for power dissipation is well known in the art of electronic devices. Therefore it would have been obvious to one of ordinary

skill in the art to use such compensation in the device of Oda for the advantage of enhanced signal.

Regarding claim 12, imaging elements comprising mirrors and lenses are well known in the art of electronic devices. Therefore it would have been obvious to one of ordinary skill in the art to use such elements in the device of Oda for the advantage of enhanced signal.

Regarding claim 13, digital programming means are well known in the art of electronic devices. Therefore it would have been obvious to one of ordinary skill in the art to use such elements in the device of Oda for the advantage of flexible programming.

Regarding claims 14-15, integrating amplifiers and A/D convertors are well known in the art of radiation detectors. Therefore it would have been obvious to one of ordinary skill in the art to use such elements in the device of Oda for the advantage of enhanced signal.

Regarding 16, the use of an infrared radiation sensor to control a temperature value is well known in the art of infrared radiation sensors. Therefore it would have been obvious to one of ordinary skill in the art to use circuits to enable such control in the device of Oda for the advantage of controlling temperature.

Regarding 18, the use of power functions to simulate the response of a sensor is well known in the art of sensors. Therefore it would have been obvious to one of ordinary skill in the art to use circuits to enable such simulation in the device of Oda for the advantage of proper temperature compensation.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oda as applied to claim 1 above, and further in view of Rosenthal, U. S. Patent No. 4,801,804. Oda does not teach the use of an electrically conductive window. However, Rosenthal teaches that an electrically conductive window in an infrared detector produces the advantage of shielding from electromagnetic interference (col. 4, lines 28-33). Therefore it would have been obvious to one of ordinary skill in the art to provide such a window in the device of Oda for the advantage of electromagnetic shielding.

Response to Arguments

Applicant's arguments filed March 18, 2004 have been fully considered but they are not persuasive.

Regarding applicant's argument (page 7, last paragraph and page 8, first paragraph) that Oda does not describe a temperature sensitive reference means which provides a temperature dependent second electric signal, it is noted that Oda teaches (col. 7, lines 6-10) that the reference element is used to remove electric signals due to thermal drift. This implies the presence of an electric signal produced by the reference element, and the presence of a correction circuit.

Regarding applicant's argument (page 8, last paragraph and page 9, first and second paragraphs) that Oda does not describe an easily understandable device, it is considered that the reference means is intended to measure small signals from the thermopile even though thermal contact is good between the thermopile and the substrate. Therefore it is considered that one of ordinary skill in the art would understand that the structures of Oda are useful.

Applicant's arguments, see page 7, second paragraph, filed March 18, 2004, with respect to claim 4 have been fully considered and are persuasive. The rejection of claim 4 under 35 U.S.C. 112 has been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Moran whose telephone number is 571-272-2443. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. M.

TM
March 30, 2004

CONSTANTINE HANNAHER
PRIMARY EXAMINER
GROUP ART UNIT 2878